

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 2127
TO BE ANSWERED ON 18.12.2025

Mitigation measures for stubble burning

2127. SHRI SANT BALBIR SINGH:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- a) the details of stubble burning cases across various States, particularly in Punjab, from 2022 to 2025 along with the most affected districts;
- b) the steps being taken to curb stubble burning and the manner in which Government is coordinating with State Governments to mitigate this issue; and
- c) whether there are any successful models or alternative solutions in certain districts that could be replicated in other States to reduce stubble burning?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) : The details of stubble burning incidents across various States, including Punjab, from 2022 to 2025 (during paddy harvesting season: 15th September to 30th November) are as under:

Name of States	Number of Incidences of Paddy Stubble Burning in the States			
	2022	2023	2024	2025
Punjab	49922	36650	10909	5114
Haryana	3661	2296	1406	662
UP whole	3017	3985	6142	7290
(UP NCR)	(198)	(212)	(414)	(281)
Total	56600	42931	18457	13066

Out of total 23 districts which have reported stubble burning events in Punjab, the districts of Amritsar, Barnala, Bathinda, Faridkot, Fazilka, Firozpur, Kapurthala, Ludhiana, Mansa, Moga, Muktsar, Patiala, Sangrur and Tarn Taran have reported more than 100 burning events in 2025.

(b) & (c): The details of various measures undertaken by the Government steps including alternative solutions to address the issue paddy stubble burning are enclosed at **Annexure I**.

Measures undertaken by the Government including successful models for prevention of Paddy stubble burning

- i. To address air pollution in Delhi-NCR, Government has established the Commission for Air Quality Management (CAQM) under the Commission for Air Quality Management in NCR and Adjoining Areas Act, 2021 for better coordination, research, identification and resolution of problems of air pollution in Delhi- NCR and adjoining areas. Commission has been provided powers under the Act to take measures and issue directions to the various agencies in the National Capital Region for protecting and improving air quality.
- ii. To support the efforts of the Governments of Punjab, Haryana, Uttar Pradesh and NCT of Delhi to address air pollution caused due to paddy stubble burning and to subsidize machinery required for management of crop residue, a Central Sector Scheme on Crop Residue Management has been implemented by MoAFW since 2018-19.
- iii. Under this scheme, financial assistance @ 50% is provided to the farmers for purchase of CRM machinery and financial assistance @ 80% is provided to Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of Farmers (Agriculture/ Horticulture/Makhana etc.), Day-NRLM Cluster Level Federations and Self Help Groups (SHGs), Farmer Producer Organizations (FPOs) and Panchayats for establishment of Custom Hiring Centres of crop residue management machines. CRM scheme promotes the usage of machines such as Super Straw Management Systems, Happy Seeder, Super Seeder, Smart Seeder, Surface Seeder, Zero till seed cum fertilizer drill, Mulcher, Paddy Straw Chopper, Hydraulically Reversible Mould Board plough, Crop reapers and Reaper binders for in-situ management of crop residue.
- iv. Financial support of 65% up to a maximum of Rs. 1.50 Crore is also provided to paddy supply chain projects on the capital cost of machinery and equipment like higher HP Tractors, Cutters, Tedder, Medium to large Balers, Rakers, Loaders, Grabbers & Tele handlers.
- v. During the period from 2018-19 to 2025-26 (as on 04.12.2025), Rs. 4090.84 crores have been released. The States have distributed more than 3.46 lakh machines to the individual famers and established more than 43285 CHCs in the States.
- vi. Inter-Ministerial Committee (IMC) was constituted on 18.12.2023 to regularly monitor the effective time bound implementation of the various schemes for management of paddy straw in a convergent and synergistic manner.
- vii. Financial assistance to the States and ICAR is also provided for undertaking Information, Education and Communication activities for mass awareness of farmers on crop residue management. The scheme promotes the usage of machines and equipment recommended by ICAR for management of crop residue for in-situ management as well as ex-situ utilization.
- viii. ICAR has developed Pusa Decomposer, a microbial consortium of fungal species (in liquid, capsule and powder forms) for rapid decomposition of paddy straw. Use of this

consortium accelerates process of paddy straw decomposition in the field itself in 20-25 days.

- ix. Central Pollution Control Board (CPCB) provides one-time financial support for establishment of pelletization and Torrefaction plants to promote utilisation of paddy straw.
- x. Ministry of Power has established National Mission of Use of Biomass in Coal based thermal power plants to address the issue of air pollution due to farm stubble burning. A comprehensive policy for co-firing of biomass pellets in Coal based Thermal Power Plants has been issued on 7th November, 2025.
- xi. CAQM has issued directions to all the Coal based Thermal Power Plants located within 300 Kms radius of Delhi to co-fire biomass based pellets, torrefied pellets/ briquettes (upto 5-10%) with coal to promote use of biomass.
- xii. MoEFCC through notification dated 11.07.2023, as amended, notified Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023 mandating minimum five per cent blend of pellets or briquettes made of crop residue along with coal by the Thermal Power Plants in the NCR and Adjoining Areas, failing which said Rules stipulates certain amount of Environmental Compensation against the Thermal Power Plants, as per unit of electricity generated.
- xiii. Ministry of New and Renewable Energy (MNRE) provides Central Financial Assistance (CFA) for setting up of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/ generation of producer or syngas, from urban, industrial, agricultural wastes and municipal solid waste. Details of financial assistance are as below:
 - Briquette manufacturing plant: Rs. 9 lakh/TPH with a maximum of Rs. 45 lakhs per project.
 - Non-torrefied pellet manufacturing plant: Rs. 21 lakhs/TPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 105 lakhs per project).
 - Torrefied pellet manufacturing plant: Rs. 42 lakhs/TPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 210 lakhs per project).
- xiv. Ministry of Petroleum and Natural Gas (MoPNG) has launched a scheme to provide financial assistance to Compressed Bio-gas producers for procurement of biomass aggregation equipment for ex-situ management of paddy straw.
- xv. Ministry of Petroleum and Natural Gas has launched 'Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana' to provide financial support for integrated bio-ethanol projects for setting up Advanced Biofuels projects in the country using lignocellulosic biomass and other renewable feedstock, i.e. agricultural and forestry residues, industrial waste, synthesis (syn) gas, algae etc. The aims to provide remunerative income to farmers for their agriculture residue, address environmental pollution, create local employment opportunities, and contribute to India's energy security and self-reliance.

- xvi. CAQM through Direction 90 dated 09.05.2025 directed the States to plan for rent-free availability of CRM machines for small / marginal farmers.
- xvii. CAQM, vide Direction No. 92 dated 03.06.2025, directed the State Governments of Punjab and Haryana to mandate use of paddy straw-based bio-mass pellets / briquettes in all brick kilns located in the districts beyond NCR, as one of the means towards elimination of the practice of open paddy stubble burning.
- xviii. CAQM has issued Direction No. 95 on 01.10.2025 authorizing the Deputy Commissioners / District Collectors / District Magistrates in the States of Punjab, Haryana, NCR areas of Rajasthan and Uttar Pradesh and in the NCT of Delhi to file a complaint before jurisdictional judicial magistrate, in case of inaction in respect of officials, including nodal officers and supervisory officers at various levels and Station House Officers, responsible for effective enforcement towards ensuring elimination of paddy stubble burning in their respective jurisdiction.
- xix. CAQM has issued directions to State Governments of Punjab and Haryana to mandate use of paddy straw-based biomass pellets / briquettes in all brick kilns located in the districts beyond NCR, as one of the means towards elimination of the practice of open paddy stubble burning.
- xx. 31 Flying Squads from CPCB have been deployed from 01-10-2025 to 30-11-2025 in identified hotspot districts in Punjab and Haryana to closely monitor the actions and coordinate with the concerned authorities / officers at the district level, officers of the Pollution Control Boards/CAQM cell. These teams provide daily updates, photographic evidence, and compliance status.
- xxi. In addition to the above mentioned measures/action, the Government has regularly reviewed and monitored the actions taken to address air pollution including stubble burning related issues in Delhi-NCR and adjoining areas. Some of the recent key meetings are as below:
 - a. Minister level Inter-Ministerial meeting was held on 07.10.2025 under the Co-chairmanship of Hon'ble Minister for Environment, Forest and Climate Change and Hon'ble Minister for Agriculture & Farmers' Welfare on the issues of management of Crop Residue Burning;
 - b. Regular review meetings have been held on 08.08.2025, 16.09.2025, 10.10.2025, 11.11.2025 and 03.12.2025 under the chairmanship of the Hon'ble Minister for Environment, Forest and Climate Change, on the issues relating to air pollution control in Delhi-NCR, to deliberate upon the undertaking of air pollution abatement measures and strategies for further strengthening air quality management across the region.
- xxii. The States of Punjab and Haryana have collectively recorded about 90% reduction in fire incidences during paddy harvesting season in the year 2025 in comparison to the same period in the year 2022.
